School Readiness Indicators - California DRAFT

Expert Comments

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"A" LIST - 9 INDICATORS UNDER CONSIDERATION FOR USE

Indicator #	Indicator Title	Description	Data Sources and Information	Rationale or Connection	Notes
	CHILDREN'S HEALTH				
A1	**Medical insurance**	Percentage of children with medical insurance.	**Recommended source**: The California Health InterView Survey (CHIS) by UCLA Health Policy Research is the only data source that provides the number and percentage of children with health insurance at the county and state level. CHIS is the largest state health survey conducted in the United States. Over 12,000 children were surveyed and 5,000 youth. Data are reported at a 95% confidence interval. County level results are available for 33 individual counties and "cluster" area results are available for 25 counties (in groupings of 2-6 counties). Clusters were used in order to have a large enough sample size so that they make accurate estimates. Also, data are available by ethnicity. However, only one year of data are available (2001), so multiple years of data could not be reported (to illustrate a trend). CHIS will conduct a second survey in 2003 and report results in 2004. Another source for state level data is the Current Population Survey (CPS); data are released yearly (some large county data are available by	Insured children are more likely to receive timely preventive care, immunizations, hearing and vision screening and treatment as well as have their development regularly monitored.	
A2	**Immunization rate**	Percentage of children with up-to-date immunizations at age 2.	**Recommended source:** Centers for Disease Control and Prevention (CDC), National Immunization Survey is the only data source that provides data for the percentage of children with up-to-date immunizations (iz) for children close to age two (see AAP recommendation). They provide data for children 19-35 months who have received vaccinations according the recommended series. The data are gathered via a random-digit-dialing survey of 30,000 households and verified by contacting the child's provider (data are reported using a 95% confidence interval). Data are released yearly and some ethnic group data are reported (API, Latino and White were last reported). The Immunization Branch of the California Department of Health Services also provides state and county level iz data, providing the percentage of children enrolled in child care and kindergarten fully immunized. However, data are only available for young children enrolled in child care or children who have reached age five in	Children not receiving timely immunizations are at risk of contracting life-threatening diseases.	The American Academy of Pediatrics recommends that children receive the recommended vaccination series by age two.
A3	**Low birth weight rate**	Percentage of infants born weighing less than 5.8 lbs.	**Recommended source**: California Department of Health Services, Vital Statistics, Birth Records. Data are released yearly and are available at the state, county level and by ethnicity.	Those born with low birthweight are nearly twice as likely as their peers to suffer severe developmental delays, congenital anomalies, cerebral palsy, autism, mental retardation, vision and hearing impairments, and other developmental disabilities	

	EARLY CARE AND EDUCATION				
A4	**Preschool participation**	The percentage of 3-5 year olds enrolled in preschool by income.	**Recommended source**: CPS's ferret system provides state level preschool participation rates yearly (data available by income; some ethnic data may not be available due to small population size). CPS advises that the reliability is not very good due to the small number of people responding that they have children enrolled in nursery school. We could use three year averages to improve the reliability of the data. Both Census 2000 and CHIS provide preschool participation data for the state. However, the Census data are released every ten years and CHIS may not provide preschool participation data in the future.	Several recently released reports, including a widely publicized July 2000 study issued by RAND, have noted the connection between preschool participation and improved student performance in later school years.	
	FAMILY ECONOMIC SECURITY				
A5	**Hunger/Food security**	Percentage of children who experienced food insecurity in the last twelve months.	**Recommended Source**: US Department of Agriculture analyzes data provided by CPS and releases the hunger/food security data yearly at the state level. USDA measures the percentage of children living in food insecure households and presents data as two year averages. Another source for the data is CHIS. The data were released in 2002 and it is uncertain whether the data will be reported in the future. CHIS surveyed households with annual income up to 200 percent of the Federal Poverty Level (FPL) rather than all households.	Nutrition has a significant impact on children's physical growth and cognitive development. Children are less likely to perform well during classroom activities and on tests if they do not have adequate nutrition.	
A6	**Child poverty rate**	Percentage of children living in poverty.	**Recommended source**: CPS provides poverty data yearly for both the state and county level. Data are reported w/a 90% confidence interval. For smaller counties the range of the number and percentage of children living in poor households can be large. For example, in Alpine County, 79 children are estimated to live in poverty, representing 29.3% of children in Alpine. However, the confidence interval includes 55-102 children or 20.6% to 38.1% of children living in poverty.	Children most at risk for not achieving their full potential are children living in poverty regardless of race. Persistent poverty has more detrimental effects on IQ, school achievement, and social-emotional functioning than does transient poverty, although children in both groups generally do worse than children who have never been poor.	
A7	**Low income children**	Percentage of children who qualify for free or reduced-price lunch.	**Recommended source**: CPS provides the total number of California children living in households with incomes at or below 185% of the FPL. By using demographics data, the number of children/youth ages 5-17 living at or below 185% of the FPL can be estimated. State and county level data are available.	Among other disadvantages, low-income children are less likely to participate in preschool compared to higher-income children.	
	EARLY RISK FACTORS				
A8	**Teen birth rate**	Rate of births to females ages 15 – 19 per 1,000 females of that age.	**Recommended source**: California Department of Health Services, Vital Statistics, Birth Records. Data are released yearly and are available at the state, county level and by ethnicity.	Children born to teen parents are more likely to suffer poor health, experience learning and behavior problems and live in poverty.	
A9	**Mother's education <12th grade**	Percentage of children born to mothers with less than 12 years of education.	**Recommended source**: California Department of Health Services, Vital Statistics, Birth Records. Data are released yearly and are available at the state, county level and by ethnicity.	Children's performance in reading, mathematics and general knowledge increases with the level of their mother's education.	

K-12 EDUCATION					
A10	**Reading/Math assessments**	Percentage of students scoring at or above 50th National Percentile Rank (NPR) on California standardized reading tests and math tests in 2nd grade and 4th grade.	**Recommended source**: California Department of Education, STAR results (includes test results from: California Standards Tests, Stanford Achievement Test, Ninth Edition, Form T (in 2003, will be replaced by California Achievement Test, Sixth Edition (CAT/6), and Spanish Assessment of Basic Education, 2nd Edition (SABE/2) for Spanish speaking students enrolled in schools less than 12 months). Data are released yearly and are available at the state, county, school district and school level. Data provided are the percentage of children scoring at or above the National Percentile Rank (NPR). Data are available by ethnicity as well as those children who qualify for	Early reading scores are a predictor of later reading success.	

"B" LIST - 28 INDICATORS UNDER CONSIDERATION FOR FUTURE USE

Indicator #	Indicator Title	Description	Data Sources	Rationale or Connection	Notes
	EARLY DEVELOPMENT				
B1	Visual ability important to classroom activities	Percentage of children entering kindergarten with untreated vision problems.	These data are not currently available.	Untreated vision problems can impede children's ability to receive or process information.	
B2	Auditory ability important to classroom activities	Percentage of children entering kindergarten with untreated hearing problems.	These data are not currently available.	Untreated hearing loss can impede children's ability to receive or process information.	
B3	Children demonstrate effective social and interpersonal skills	Percentage of kindergartners who demonstrate positive social skills.	Currently, there is no statewide kindergarten assessment system in California. Efforts are underway to develop model assessments by various entities. The Office of the Secretary for Education is spearheading a project to issue a request for proposals (RFP) for a kindergarten assessment. Currently, the RFP is under review. The kindergarten assessment would be conducted about six weeks after children start kindergarten. First 5 has just completed the pilot phase of their kindergarten assessment, using a modified version of CDE's "Desired Results" assessment tool. The assessment will be used in targeted schools and will measure social/emotional, language development, and	Children who are socially and emotionally ready for school generally have improved school outcomes.	
B4	Children demonstrate self-regulation of their behavior	Percentage of kindergartners who demonstrate self-regulation of their behavior.	See B3 above.	Children who are socially and emotionally ready for school generally have improved school outcomes.	
B5	Children are interested in learning new things	Percentage of kindergartners who are interested in learning new things.	See B3 above.	Children who frequently exhibit a positive approach to learning are more than twice as likely as other children to score in the top 25 percent in reading and mathematics at the spring of kindergarten.	
	CHILDREN'S HEALTH				
B6	Timely developmental screenings	Percentage of children who receive developmental screening at age 3.	These data are not currently available.	Children whose developmental issues have not been diagnosed before kindergarten enter school at a distinct disadvantage.	
B7	Regular source of health care/ primary provider	Percentage of children who have a regular source of health care.	These data are not currently available.	Children and families who have access to health insurance and develop a relationship with their health care provider are better able to monitor their child's development, preparing them for school.	
B8	Well-child checks/screenings	Number and percentage of children who receive recommended well-baby and child checkups by age 2.	These data are not currently available.	See above.	

B9	Access to dental care	Number and percentage of children 3 and older who receive annual dental exams.	These data are not currently available. However, CHIS does provide data about the number and percentage of children (under 12) who have dental insurance. Research shows, however, that even if children have dental insurance, they may lack access to a dental provider due to the low numbers of providers statewide and particularly in certain counties. The CHIS data are available on the county and state level.	Oral disease affects the teeth, gums, and rest of the mouth, and also can lead to serious general health problems and significant pain, interference with eating and speech, as well as lost school time.	
B10	Hearing screening/referrals	Percentage of newborns who receive hearing screening.	These data are not currently available.	Hearing loss can impede children's ability to receive or process information.	
B11	Lead poisoning rates	Percentage of 0-5-year olds screened for lead who have elevated blood lead levels (>10ug/dl).	These data are not currently available. The California Department of Health Services reports data on the percentage of 0-5 year olds screened for lead who have elevated blood lead levels greater than 10 micrograms/deciliter and 20 micrograms/deciliter. However, in California, doctors are only required to report BLLs greater than 20 micrograms/deciliter and reporting BLLs greater than 10 micrograms/deciliter is optional. Therefore, researchers estimate that the number of children in California w/greater than 10 micrograms/deciliter is much higher than what is	The CDC reports that elevated blood levels (BLLs) of 10 micrograms per deciliter and higher adversely affect the cognitive development and behavior of young children.	
	INFANT HEALTH INDEX				
B12	Four Factors: 1. Late (3rd tri.) or no prenatal care 2. Low maternal weight gain (less than 21 lbs.) 3. Mother smoked during pregnancy 4. Mother drank alcohol during pregnancy.	At birth: 1. Percentage of mothers w/late or no prenatal care 2. Percentage of mothers w/low maternal weight gain 3. Percentage of mothers smoking during pregnancy 4. Percentage of mothers drinking during pregnancy	**Recommended source**: The California Department of Health Services reports the number of pregnant women who have late (third trimester) or no prenatal care. DHS data are reported yearly by state, county and ethnicity. The CDC, National Vital Statistic Reports provides maternal weight gain, smoking, and drinking alcohol during a pregnancy at the state level by ethnicity. CDC tabulates the data from information provided on the birth certificates. Data can be computed by individual states using a data file provided by the CDC.Data would be reported for each risk factor separately.	Maternal lifestyle and health characteristics may have adverse effects on newborns. Timely prenatal care can manage preexisting medical conditions and pregnancy related medical conditions and provide important health behavior advice. Inadequate maternal weight gain has been associated with low birthweight of infants, perinatal mortality, mental retardation, and shorter periods of gestation. Children who have been prenatally exposed to	

	EARLY CARE AND EDUCATION				
B13	Licensed family child care supply	The percentage of children under age 6 with full-time working parents served by licensed family child care.	**Recommended source**: Two sources are used to calculate these data. The California Child Care Resource & Referral Network (CCCRRN) provides state level and county level data on the number of family child care spaces available every other year (next release 2003). CCCRRN represents 61 community resource and referral agencies and the supply of child care data are based on R&Rs' databases of licensed child care providers. The Census provides the number of children under age six with full-time working parents via a special data run (Urban Studies Institute, University of Louisville	Children who receive high quality child care have been shown to improve their cognitive and social development.	
B14	Licensed child care center supply	The percentage of children under age 6 with full-time working parents served by a licensed child care center.	See B13 above.	See B13 above.	
B15	Enrollment: Head Start	Percentage of eligible 3 and 4-year-olds enrolled in Head Start.	**Recommended source**: Multiple sources are used to calculate these data. US Department of Health and Human Services provides data about the number of children enrolled in Head Start: data are reported yearly by state and county level. By using Census data, the number of children ages 3-4 living in poverty can be estimated from the number of children ages 0-4 living in poverty based on the proportion of children ages 3-4 relative to the total number of children ages 0-4 (Department of Finance Demographics data). The Census data are statistically reliable at	Children who receive high quality child care have been shown to improve their cognitive and social development, and gains appear to be greatest among children from disadvantage backgrounds.	
B16	Subsidized child care	Percentage of eligible families receiving subsidies.	These data are not currently available.	See B15 above.	
B17	Education levels of providers/teachers	Percentage of staff with early childhood education degree or training.	These data are not currently available.	Research indicates that the quality of child care is related to both the formal education levels and the specialized early childhood training of classroom teachers.	
B18	Retention rates of staff at early care programs	Percentage turnover in early care programs year to year.	These data are not currently published at the state level.	Children attending lower-quality centers and centers with more staff turnover are less competent in their language and social development.	
	NUTRITION AND FOOD PROGRAMS				
B19	Breakfast and lunch programs	Percentage of schools that offer breakfast and lunch programs.	**Recommended source**: The California Department of Education provides these data annually at the state, county and school district levels (for both programs).	Studies show that being hungry or lacking proper nutrition impacts a child's behavior at school, school achievement and cognitive development. Children in the School Breakfast Program have been shown to have significantly higher standardized achievement test scores	

	K-12 EDUCATION				
B20	Credentialed elementary level teachers	Percentage of credentialed teachers.	**Recommended source**: The California Department of Education's Classroom Teacher Credential and Experience Report provides these data yearly. Data are available at the state and county level.	Properly trained teachers improve student achievement. Research shows that teacher education is critical to the success of reading instruction.	
B21	Before school programs provided	Number and rate of after school programs per 1,000 low-income children with working parents or single working parent (wkg. full-time or 35+ hours	See below.	See below.	
B22	After school programs provided	Number and rate of before school programs per 1,000 low-income children with working parents or single working parent (wkg full-time or 35+ hours per week)	**Recommended source**: Multiple sources would be used to calculate these data. The Census provides the number of children ages 5-14 with full-time working parents via a special data run (Urban Studies Institute, University of Louisville performs the run). The number of children ages 5-14 living at or below 185% of the FPL would be estimated using the percentage of the total 5-14 child population. The number of children in subsidized before/after school programs can be found using the following sources: The Before and After School Learning and Safe Neighborhoods Partnership Programs (BASLSNPP), 21st Century Community Learning Centers, child care subsidy programs, and subsidized after school spaces.	California Department of Education's Evaluation of After School Programs found that after school program participants improved their reading scores at a rate more than twice that of all students statewide. Furthermore, studies have shown that students attending after school programs have better attendance records at school, fewer school suspensions, and are better able to get along with peers.	
B23	Coursework in early childhood development (for elementary teachers)	Percentage of kindergarten and 1st grade teachers with early child development units.	These data are not currently available. CDE does not collect these data.	Research has found that early care and education teachers who have completed college level early childhood education courses provide higher quality and age appropriate care and teaching to young children.	
B24	Retention in K or Grade 1	Percentage of students retained in kindergarten or Grade 1.	These data are not currently available. CDE does not collect these data.	Early grade retention is associated with poor academic performance, later behavior problems and a greater likelihood of dropping out of high school.	
	CHILD WELFARE				
B25	Child abuse/neglect reports	The number and rate per 1,000 children abused/neglected.	**Recommended source**: The University of California, Berkeley, Child Welfare Research Center, Child Welfare Services/Case Management System reports these data yearly by state and county level, using data provided by DSS. CWRC can provide data for "reports" and "substantiated reports." A child with multiple reports is counted once; each child in a family has his/her own report.	Studies have found that experiencing abuse and/or neglect can damage children's physical, emotional, social and cognitive development. Children experiencing abuse and/or neglect are less likely to succeed in school compared to other children.	
B26	Children witnessing domestic violence	Number and rate per 1,000 children exposed to domestic violence.	These data are not currently available.	Studies have found that children exposed to domestic violence demonstrated impaired ability to concentrate, difficulty in their schoolwork, and significantly lower scores on measures of verbal, motor, and cognitive skills.	

	PARENT/CAREGIVER INVOLVEMENT				
B27	Family-child reading and storytelling	Percentage of 3-5 year olds whose parents read to them or tell them stories regularly.	These data are not currently available.	Children who are read to at least three times a week are almost twice as likely to score in the top 25 percent in reading than children read to less than three times a week.	